

Snk

#15

PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/869,155

DATE: 10/29/2001

TIME: 11:34:39

Input Set : A:\78883132.app

Output Set: N:\CRF3\10292001\I869155.raw

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3 <110> APPLICANT: SIBBESEN, OLE  
4 SORESENSEN, JENS FRISBAEK  
6 <120> TITLE OF INVENTION: PROTEINS  
8 <130> FILE REFERENCE: 078883/0132  
10 <140> CURRENT APPLICATION NUMBER: 09/869,155  
11 <141> CURRENT FILING DATE: 2001-06-25  
13 <150> PRIOR APPLICATION NUMBER: PCT/IB99/02071  
14 <151> PRIOR FILING DATE: 1999-12-17  
16 <150> PRIOR APPLICATION NUMBER: GB 9828599.2  
17 <151> PRIOR FILING DATE: 1998-12-23  
19 <150> PRIOR APPLICATION NUMBER: GB 9907805.7  
20 <151> PRIOR FILING DATE: 1999-04-06  
22 <150> PRIOR APPLICATION NUMBER: GB 9908645.6  
23 <151> PRIOR FILING DATE: 1999-04-15  
25 <160> NUMBER OF SEQ ID NOS: 19  
27 <170> SOFTWARE: PatentIn Ver. 2.1  
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51 Xylanase Inhibitor  
53 <400> SEQUENCE: 1  
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55 1 5 10 15  
W--> 57 Xaa Tyr Asp Thr Lys Thr Leu Gly Asn Asn Leu Gly Gly Tyr Ala Val  
58 20 25 30  
W--> 60 Pro Asn Gln Leu Gly Leu Leu Asp Gly Gly Xaa Asp Trp Thr Met Ile  
61 35 40 45  
W--> 63 Xaa Lys Asn Ser Met Val Asp Val Lys  
64 50 55  
67 <210> SEQ ID NO: 2  
68 <211> LENGTH: 38  
69 <212> TYPE: PRT

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74 <222> LOCATION: (26)
75 <223> OTHER INFORMATION: Any Amino Acid
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89 <222> LOCATION: (38)
90 <223> OTHER INFORMATION: Any Amino Acid
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
94   Xylanase Inhibitor
96 <400> SEQUENCE: 2
97 Gly Pro Pro Leu Ala Pro Val Thr Glu Ala Pro Ala Thr Ser Leu Tyr
98   1             5             10             15
W--> 100 Thr Ile Pro Phe His His Gly Ala Ala Xaa Val Leu Asp Val Xaa Ser
101             20             25             30
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104             35
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112 <220> FEATURE:
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116 Met Phe Lys Phe Lys Lys Lys Phe Leu Val Gly Leu Thr Ala Ala Phe
117   1             5             10             15
119 Met Ser Ile Ser Met Phe Ser Ala Thr Ala Ser Ala Ala Gly Thr Asp
120             20             25             30
122 Tyr Trp Gln Asn Trp Thr Asp Gly Gly Gly Thr Val Asn Ala Val Asn
123             35             40             45
125 Gly Ser Gly Gly Asn Tyr Ser Val Asn Trp Ser Asn Thr Gly Asn Phe
126             50             55             60
128 Val Val Gly Lys Gly Trp Thr Thr Gly Ser Pro Phe Arg Thr Ile Asn
129   65             70             75             80
131 Tyr Asn Ala Gly Val Trp Ala Pro Asn Gly Asn Gly Tyr Leu Thr Leu
132             85             90             95
134 Tyr Gly Trp Thr Arg Ser Pro Leu Ile Glu Tyr Tyr Val Val Asp Ser
135             100            105            110
137 Trp Gly Thr Tyr Arg Pro Thr Gly Thr Tyr Lys Gly Thr Val Lys Ser

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138          115          120          125
140 Asp Gly Gly Thr Tyr Asp Ile Tyr Thr Thr Thr Arg Tyr Asn Ala Pro
141          130          135          140
143 Ser Ile Asp Gly Asp Asn Thr Thr Phe Thr Gln Tyr Trp Ser Val Arg
144 145          150          155          160
146 Gln Ser Lys Arg Pro Thr Gly Ser Asn Ala Ala Ile Thr Phe Ser Asn
147          165          170          175
149 His Val Asn Ala Trp Lys Ser His Gly Met Asn Leu Gly Ser Asn Trp
150          180          185          190
152 Ala Tyr Gln Val Leu Ala Thr Glu Gly Tyr Lys Ser Ser Gly Ser Ser
153          195          200          205
155 Asn Val Thr Val Trp
156          210
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161 <212> TYPE: DNA
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164 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Unknown Organism: Xylanase
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169 atgttttcgg caaccgcctc tgcagctggc acagattact ggcaaaattg gactgacggg 120
170 ggcgggacag taaacgcagt caatggctct ggcggaaatt acagtgttaa ttggtctaata 180
171 accgggaatt tcgttggttg taaaggctgg actacaggct cgccatttag aacaataaac 240
172 tataatgccg gtgtttgggc gccgaatggc aatggatatt taactttata tggctggacg 300
173 agatcgcccc tcatcgaata ttatgtggtg gattcatggg gtacttacag acctaccgga 360
174 acgtataaag gtaccgtaaa gagtgatgga ggtacatatg acatatatac aacgacacgt 420
175 tataacgcac ctccatttga tggcgataac actactttta cgcagtactg gagtgtccgc 480
176 cagtcgaaga gaccgaccgg aagcaacgct gcaatcactt tcagcaatca tgtaaacgca 540
177 tggaagagcc atggaatgaa tctgggcagt aattgggctt atcaagtctt agcgacagaa 600
178 ggatataaaa gcagcggaag ttctaattga acagtgtggt aa 642
181 <210> SEQ ID NO: 5
182 <211> LENGTH: 213
183 <212> TYPE: PRT
184 <213> ORGANISM: Bacillus subtilis
186 <400> SEQUENCE: 5
187 Met Phe Lys Phe Lys Lys Asn Phe Leu Val Gly Leu Ser Ala Ala Leu
188 1          5          10          15
190 Met Ser Ile Ser Leu Phe Ser Ala Thr Ala Ser Ala Ala Ser Thr Asp
191          20          25          30
193 Tyr Trp Gln Asn Trp Thr Asp Gly Gly Gly Ile Val Asn Ala Val Asn
194          35          40          45
196 Gly Ser Gly Gly Asn Tyr Ser Val Asn Trp Ser Asn Thr Gly Asn Phe
197          50          55          60
199 Val Val Gly Lys Gly Trp Thr Thr Gly Ser Pro Phe Arg Thr Ile Asn
200 65          70          75          80
202 Tyr Asn Ala Gly Val Trp Ala Pro Asn Gly Asn Gly Tyr Leu Thr Leu
203          85          90          95
205 Tyr Gly Trp Thr Arg Ser Pro Leu Ile Glu Tyr Tyr Val Val Asp Ser

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206          100          105          110
208 Trp Gly Thr Tyr Arg Pro Thr Gly Thr Tyr Lys Gly Thr Val Lys Ser
209          115          120          125
211 Asp Gly Gly Thr Tyr Asp Ile Tyr Thr Thr Thr Arg Tyr Asn Ala Pro
212          130          135          140
214 Ser Ile Asp Gly Asp Arg Thr Thr Phe Thr Gln Tyr Trp Ser Val Arg
215 145          150          155          160
217 Gln Ser Lys Arg Pro Thr Gly Ser Asn Ala Thr Ile Thr Phe Ser Asn
218          165          170          175
220 His Val Asn Ala Trp Lys Ser His Gly Met Asn Leu Gly Ser Asn Trp
221          180          185          190
223 Ala Tyr Gln Val Met Ala Thr Glu Gly Tyr Gln Ser Ser Gly Ser Ser
224          195          200          205
226 Asn Val Thr Val Trp
227          210
230 <210> SEQ ID NO: 6
231 <211> LENGTH: 642
232 <212> TYPE: DNA
233 <213> ORGANISM: Bacillus subtilis
235 <400> SEQUENCE: 6
236 atgtttaagt ttaaaaagaa tttcttagtt ggattatcgg cagctttaat gagtattagc 60
237 ttgttttcgg caaccgcctc tgcagctagc acagactact ggcaaaattg gactgatggg 120
238 ggcggtatag taaacgctgt caatgggtct ggcgggaatt acagtgttaa ttggtctaata 180
239 accggaaatt ttgttggttg taaagggttg actacagggt cgccatttag gacgataaac 240
240 tataatgccg gagtttgggc gccgaatggc aatggatatt taactttata tggttggacg 300
241 agatcacctc tcatagaata ttatgtagtg gattcatggg gtacttatag acctactgga 360
242 acgtataaag gtactgtaaa aagtgatggg ggtacatatg acatatatac aactacacgt 420
243 tataacgcac ctccattgga tggcgatcgc actactttta cgcagtactg gagtgttcgc 480
244 cagtcgaaga gaccaaccgg aagcaacgct acaatcaact tcagcaatca tgtgaacgca 540
245 tggaagagcc atggaatgaa tctgggcagt aattgggctt accaagtcac ggcgacagaa 600
246 ggatatcaaa gtagtggaag ttctaacgta acagtgtggt aa 642
249 <210> SEQ ID NO: 7
250 <211> LENGTH: 213
251 <212> TYPE: PRT
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
256 Mutant Xylanase
258 <400> SEQUENCE: 7
259 Met Phe Lys Phe Lys Lys Asn Phe Leu Val Gly Leu Ser Ala Ala Leu
260 1          5          10          15
262 Met Ser Ile Ser Leu Phe Ser Ala Thr Ala Ser Ala Ala Ser Thr Asp
263          20          25          30
265 Tyr Trp Gln Asn Trp Thr Asp Gly Gly Gly Thr Val Asn Ala Val Asn
266          35          40          45
268 Gly Ser Gly Gly Asn Tyr Ser Val Asn Trp Ser Asn Thr Gly Asn Phe
269          50          55          60
271 Val Val Gly Lys Gly Trp Thr Thr Gly Ser Pro Phe Arg Thr Ile Asn
272 65          70          75          80

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Input Set : A:\78883132.app

Output Set: N:\CRF3\10292001\I869155.raw

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274 Tyr Asn Ala Gly Val Trp Ala Pro Asn Gly Asn Gly Tyr Leu Thr Leu
275                85                90                95
277 Tyr Gly Trp Thr Arg Ser Pro Leu Ile Glu Tyr Tyr Val Val Asp Ser
278                100                105                110
280 Trp Gly Thr Tyr Arg Pro Thr Gly Thr Tyr Lys Gly Thr Val Lys Ser
281                115                120                125
283 Asp Gly Gly Thr Tyr Asp Ile Tyr Thr Thr Thr Arg Tyr Asn Ala Pro
284                130                135                140
286 Ser Ile Asp Gly Asp Arg Thr Thr Phe Thr Gln Tyr Trp Ser Val Arg
287 145                150                155                160
289 Gln Ser Lys Arg Pro Thr Gly Ser Asn Ala Ala Ile Thr Phe Ser Asn
290                165                170                175
292 His Val Asn Ala Trp Lys Ser His Gly Met Asn Leu Gly Ser Asn Trp
293                180                185                190
295 Ala Tyr Gln Val Leu Ala Thr Glu Tyr Lys Ser Ser Gly Ser Ser
296                195                200                205
298 Asn Val Thr Val Trp
299                210

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302 &lt;210&gt; SEQ ID NO: 8

303 &lt;211&gt; LENGTH: 642

304 &lt;212&gt; TYPE: DNA

305 &lt;213&gt; ORGANISM: Artificial Sequence ✓

307 &lt;220&gt; FEATURE:

308 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓

309 Mutant Xylanase

311 &lt;400&gt; SEQUENCE: 8

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312 atgtttaagt ttaaaaagaa tttcttagtt ggattatcgg cagctttaat gagtattagc 60
313 ttgttttcgg caaccgcctc tgcagctagc acagactact ggcaaaattg gactgatggg 120
314 ggcggtaccg taaacgctgt caatgggtct ggcgggaatt acagtgttaa ttggtcta 180
315 accggaaatt ttgttgttgg taaaggttgg actacaggtt cgccatttag gacgataaac 240
316 tataatgccg gagtttgggc gccgaatggc aatggatatt taactttata tggttggacg 300
317 agatcacctc tcatagaata ttatgtagtg gattcatggg gtacttatag acctactgga 360
318 acgtataaag gtactgtaaa aagtgatggg ggtacatatg acatatatac aactacacgt 420
319 tataacgcac ctccattga tggcgatcgc actactttta cgcagtactg gagtggtcgc 480
320 cagtcgaaga gaccaaccgg aagcaacgct gctatcactt tcagcaatca tgtgaacgca 540
321 tggaagagcc atggaatgaa tctgggcagt aattgggctt accaagtcct cgcgacagaa 600
322 ggatataaaa gttccggaag ttctaacgta acagtgtggt aa 642

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325 &lt;210&gt; SEQ ID NO: 9

326 &lt;211&gt; LENGTH: 213

327 &lt;212&gt; TYPE: PRT

328 &lt;213&gt; ORGANISM: Artificial Sequence ✓

330 &lt;220&gt; FEATURE:

331 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓

332 Mutant Xylanase

334 &lt;400&gt; SEQUENCE: 9

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335 Met Phe Lys Phe Lys Lys Asn Phe Leu Val Gly Leu Ser Ala Ala Leu
336 1                5                10                15
338 Met Ser Ile Ser Leu Phe Ser Ala Thr Ala Ser Ala Ala Ser Thr Asp
339                20                25                30

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## VERIFICATION SUMMARY

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DATE: 10/29/2001

TIME: 11:34:40

Input Set : A:\78883132.app

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L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2